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Amendments to the Claims:

- 1. (Currently amended) The method of generating a high fidelity service loads comprising the steps of:
- a). developing a service load history database <u>including multiple time series</u> models representative of different service load conditions;
 - b). combining the multiple time series models;
- c). adjusting the change a parameter of each of the time series models and creating an accelerated service load model;
- d). regenerating random vibration load data <u>based upon the accelerated service</u> load model; and
 - e). feeding the load data to a drive simulation system.
- 2. (Original) The method as recited in claim 1 wherein said step of developing a service load history further comprises modeling original random vibration tests in different time series models.
- 3. (Original) The method as recited in claim 2 wherein said step of adjusting the change in each of the time series models further comprises changing the value of σ^2 _a, where

$$f(\omega) = \frac{\Delta \sigma_a^2}{2\pi} \frac{1}{\left|e^{ni\omega\Delta} - \phi_1 e^{(n-1)i\omega\Delta} - \dots - \phi_n\right|^2}, -\frac{\pi}{\Delta} \le \omega \le \frac{\pi}{\Delta}.$$

- 4. (Original) The method as recited in claim 3 wherein said step of regenerating the random vibration load data is based upon a recursive formula.
- 5. (Original) The method as recited in claim 4 wherein said step of feeding the load data

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to a drive simulation system further comprises converting a digital signal to an analog signal and transmitting said analog signal to actuators.